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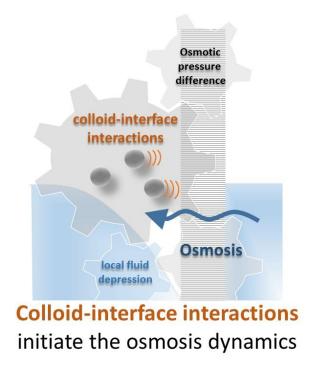
ACCEPTED MANUSCRIPT

Colloid-interface interactions initiate osmotic flow dynamics

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Graphical abstract



Highlights

- Colloid-membrane interactions lead to an interfacial depression initiating osmosis
- The model allows a continuous and dynamic description of osmosis and reverse-osmosis.
- The membrane selectivity and the counter pressure can be described by the model.
- A mechanical explanation for colloid osmotic flows is provided.

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